Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

## Amendments to the Claims:

Applicants respectfully request that the following listing of claims be entered in lieu of all prior versions and listings of claims in the instant application:

## Listing of Claims:

- (Currently Amended) In a speech recognition system, a method of speech recognition comprising:
- (a) randomly receiving an input that specifies a context in which the speech recognition system processes speech, the input, at least in part, being automatically derived in a pre-processing step that defines content for a voice generated output that is expected to be generated by a user of a computer system upon which the speech recognition system executes, the input derived being based upon non-voice input in a computer system communicatively linked to the speech recognition system, said input comprising at least one of text contained in an e-mail sent or received by [[the]] a user, information in a document attached to an e-mail sent or received by the user, information in a document viewed by the user on a display of the computer system, information in a plurality of linked documents accessible to the computer system, information in a spread sheet executing on the computer system, facsimile information received via a facsimile device connected to the computer system, call center information received via calling device connected to the computer system, and information recorded by a web browser executing on the computer system;
- (b) creating a word list defining a context-enhanced database using information derived from based upon said input or modifying an existing context-enhanced database by adding a word list created based upon said input;
- (c) preparing a first textual output from the speech signal by performing a speech recognition task to convert [[said]] a speech signal into said first textual output,

Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

wherein said context-enhanced database is accessed to improve the speech recognition rate, wherein said speech signal is parsed into a plurality of computer processable speech

segments, wherein said first textual output comprises a plurality of text segments, each

corresponding to one of the computer processable speech segments, and wherein

selective ones of the text segments are generated by matching a computer processable

speech segment against an entry within the context-enhanced database, said context-enhanced database including a plurality of entries, each entry comprising a speech

utterance and a corresponding textual segment for the speech utterance;

(d) enabling editing of said first textual output to generate a final voice-

generated output; and

(e) making said final voice-generated output available.

2. (Previously Presented) The method of claim 1, wherein each of said computer-

processable speech segments represent digitally encoded spoken words, and wherein each

of the text segments is a word in text format.

3. (Previously Presented) The method of claim 1, wherein during said speech

recognition task, said speech signals are analyzed to determine whether matches exist within the context-enhanced database for the computer-processable speech segments

before another database is searched to locate text matches for the computer-processable

speech segments.

4. (Previously Presented) The method of claim 2, wherein during said speech

recognition task, said speech signals are analyzed to determine whether matches exist

within the context-enhanced database for the computer-processable speech segments

Amdt. dated August 16, 2006

Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

before another database is searched to locate text matches for the computer-processable

speech segments.

5. (Previously Presented) The method of claim 2, wherein a second database is

accessed to find a matching word for each of said words for which no matching word was found in said context-enhanced database, wherein the context-enhanced database is

created from said input and from entries within the second database.

6. (Previously Presented) The method of claim 1, wherein at least two steps

selected from the group consisting of steps (b), (c), (d), and (e), are performed

concurrently.

7. (Previously Presented) The method of claim 1, wherein said speech utterances

and said textual segments of said context enhanced database represent words.

8. (Previously Presented) The method of claim 1, wherein said speech signal is

interpreted as part of said speech recognition task in light of entries included in said

context-enhanced database.

9.-10. (Cancelled)

11. (Currently Amended) The method of claim 1, wherein the creating step

further comprises the step of:

creating the context-enhanced database from those entries of a context-

independent database having words included within [[a]] the word list.

4

{WP327205;1}

Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

12. (Original) The method of claim 1, wherein said voice-generated output is a

physical output.

13. (Original) The method of claim 12, wherein said voice-generated output is

temporarily put into a memory.

14. (Previously Presented) The method of claim 1, wherein said editing is enabled

by highlighting words of said first textual output having a predetermined likelihood of

misinterpretation of said speech signal.

15. (Original) The method of claim 1, wherein said context-enhanced database is

derived from an existing database based upon said input.

16. (Previously Presented) The method of claim 1, wherein said context-enhanced

database is dynamically generated specifically for the specified context, wherein the

method further comprises the step of:

detecting an event signifying the context has changed; and

responsively updating said context-enhanced database.

17. (Previously Presented) The method of claim 1, further comprising the steps

of:

automatically detecting a change in one or more active applications;

responsive to the detected change, automatically deriving new input; and

responsive to the new input, dynamically updating the context-dependant database

based upon the new input.

Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

18. (Original) The method of claim 1, wherein one or more of a synonym lexicon and a meaning variants database is accessed when preparing said voice-generated output.

19-45. (Cancelled)

46. (Currently Amended) A machine-readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for

causing the machine to perform the steps of:

executing on the computer system:

(a) randomly receiving an input that specifies a context in which the speech recognition system processes speech, the input, at least in part, being automatically derived in a pre-processing step that defines content for a voice-generated output that is expected to be generated by a user of a computer system upon which the speech recognition system executes, the input derived being based upon non-voice input in a computer system communicatively linked to the speech recognition system, said input comprising at least one of text contained in an e-mail sent or received by [[the]] a user, information in a document attached to an e-mail sent or received by the user, information in a document viewed by the user on a display of the computer system, information in a plurality of linked documents accessible to the computer system, information in a spread sheet executing on the computer system, facsimile information received via a facsimile device connected to the computer system, call center information received via calling device connected to the computer system, and information recorded by a web browser

(b) creating <u>a word list defining</u> a context-enhanced database using information derived-from <u>based upon</u> said input <u>or modifying an existing context-enhanced database</u> by adding a word list created based upon said input;

Amdt. dated August 16, 2006

Reply to Office Action of May 16, 2006 Docket No. CH9-2000-0004 (246)

(c) preparing a first textual output from [[the] a speech signal by performing a

speech recognition task to convert said speech signal into said first textual output, wherein said context-enhanced database is accessed to improve the speech recognition

rate, wherein said speech signal is parsed into a plurality of computer processable speech

segments, wherein said first textual output comprises a plurality of text segments, each

corresponding to one of the computer processable speech segments, and wherein

selective ones of the text segments are generated by matching a computer processable

speech segment against an entry within the context-enhanced database, said context-

enhanced database including a plurality of entries, each entry comprising a speech

utterance and a corresponding textual segment for the speech utterance;

(d) enabling editing of said first textual output to generate a final voice-

generated output; and

(e) making said final voice-generated output available.

47. (Previously Presented) The machine-readable storage of claim 46, wherein

each of said computer-processable speech segments represent digitally encoded spoken

words, and wherein each of the text segments is a word in text format.

48. (Previously Presented) The machine-readable storage of claim 46, wherein

during said speech recognition task, said speech signals are analyzed to determine

whether matches exist within the context-enhanced database for the computerprocessable speech segments before another database is searched to locate text matches

C. discount of the control of the co

for the computer-processable speech segments.

49. (Previously Presented) The method of claim 47, wherein during said speech

recognition task, said speech signals are analyzed to determine whether matches exist

Amdt. dated August 16, 2006

Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

within the context-enhanced database for the computer-processable speech segments

before another database is searched to locate text matches for the computer-processable

speech segments.

50. (Previously Presented) The method of claim 47, wherein a second database is

accessed to find a matching word for each of said words for which no matching word was

found in said context-enhanced database, wherein the context-enhanced database is created from said input and from entries within the second database.

51. (Previously Presented) The machine-readable storage of claim 46, wherein at

least two steps selected from the group consisting of steps (b), (c), (d), and (e), are

performed concurrently.

52. (Previously Presented) The machine-readable storage of claim 46, wherein

speech utterances and said textual segments of said context enhanced database represent

words

53. (Previously Presented) The machine-readable storage of claim 46, wherein

said speech signal is interpreted as part of said speech recognition task in light of entries

included in said context-enhanced database.

54.-55. (Cancelled)

8

(WP327205;1)

Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

56. (Previously Presented) The machine-readable storage of claim 46, wherein

the creating step further comprises the step of:

creating the context-enhanced database from those entries of a context-

independent database having words included within a word list.

57. (Original) The machine-readable storage of claim 46, wherein said voice-

generated output is a physical output.

58. (Original) The method of claim 57, wherein said voice-generated output is

temporarily put into a memory.

59. (Previously Presented) The machine-readable storage of claim 46, wherein

said editing is enabled by highlighting words of said first textual output having a

predetermined likelihood of misinterpretation of said speech signal.

60. (Original) The machine-readable storage of claim 46, wherein said context-

enhanced database is derived from an existing database based upon said input.

61. (Previously Presented) The machine-readable storage of claim 46, wherein

said context-enhanced database is dynamically generated specifically for the specified

context, wherein the method further comprises the step of:

detecting an event signifying the context has changed; and

responsively updating said context-enhanced database.

Appln. No. 09/910,657 Amdt. dated August 16, 2006 Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

62. (Previously Presented) The machine-readable storage of claim 46, further comprising the steps of:

automatically detecting a change in one or more active applications;
responsive to the detected change, automatically deriving new input; and
responsive to the new input, dynamically updating the context-dependent database
based upon the new input.

- 63. (Original) The machine-readable storage of claim 46, wherein one or more of a synonym lexicon and a meaning variants database is accessed when preparing said voice-generated output.
- 64. (Currently Amended) In a speech recognition system, a method of speech recognition comprising the steps of:

randomly receiving input that specifies a context in which the speech recognition system processes speech, the input, at least in part, being automatically derived in a pre-processing step that defines content for a voice-generated output that is expected to be generated by a user of a computer system upon which the speech recognition system executes, the input derived being based upon non-voice input in a computer system communicatively linked to the speech recognition system, said input comprising at least one of text contained in an e-mail sent or received by [[the]] a user, information in a document attached to an e-mail sent or received by the user, information in a document viewed by the user on a display of the computer system, information in a plurality of linked documents accessible to the computer system, information in a spread sheet executing on the computer system, facsimile information received via a facsimile device connected to the computer system, call center information received via calling device

Amdt. dated August 16, 2006

Reply to Office Action of May 16, 2006 Docket No. CH9-2000-0004 (246)

connected to the computer system, and information recorded by a web browser executing on the computer system;

creating a word list defining a context-enhanced database based upon the input or modifying an existing context-enhanced database by adding a word list created based upon the input:

parsing a received speech signal into a plurality of speech segments;

comparing said speech segments against entries in the context-enhanced database;

when matching entries are found in the comparing step, for each matching entry retrieving a textual segment from the context-enhanced database that is associated with the matching entry; and

generating textual output for the speech signal that includes the retrieved textual segments.

65. (Previously Presented) The method of claim 64, further comprising the steps of:

when matching entries are not found in the comparing step, generating a textual segment for the speech segment using a context-independent database, wherein the generated textual output includes the generated textual segments.

66. (Previously Presented) The method of claim 65, wherein entries within the context-enhanced database are a subset of entries contained within the context-independent database that are derived from the context-independent database and the input.

67.-68. (Cancelled)

Reply to Office Action of May 16, 2006

Docket No. CH9-2000-0004 (246)

69. (Previously Presented) The method of claim 64 , wherein the creating step further comprises the step of:

creating the context-enhanced database from those entries of a context-independent database having words included within the word list.

70. (Previously Presented) The method of claim 64, further comprising the steps of:

automatically detecting a change in one or more active applications; responsive to the detected change, automatically deriving new input; and responsive to the new input, modifying the context-dependant database based upon the new input.

71. (Previously Presented) The method of claim 70, further comprising the step of: repeating the detecting step, the deriving step, and the modifying step of claim 70 to ensure the context-dependant database includes information for a current state of the active applications.